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Sexual Orientation, Attachment, and Adult Relationship Quality

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SEXUAL ORIENTATION, ATTACHMENT, AND ADULT
RELATIONSHIP QUALITY

by

Earl Calvin Riggins, III

B.S. January 1987, Christopher Newport College

A Thesis Submitted to the Faculty of
Old Dominion University in Partial Fulfillment of the
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ABSTRACT

SEXUAL ORIENTATION, ATTACHMENT, AND ADULT RELATIONSHIP QUALITY

Earl Calvin Riggins, III
Old Dominion University, 1993

Comparisons were made between 55 heterosexual males, 49 heterosexual females, 56 homosexual males, and 35 homosexual females on measures of attachment, relationship satisfaction and relationship success. Results indicated that adult homosexuals experience greater difficulty than adult heterosexuals in becoming close to others. Individuals endorsing the secure attachment style reported greater relationship satisfaction than individuals endorsing either of the two insecure attachment styles. In addition, females reported greater relationship satisfaction than males. Significantly more individuals endorsing the secure attachment style reported their mothers to have been warm/responsive; significantly more heterosexual males and females than homosexual females reported their mothers to have been warm/responsive; significantly more homosexual males than homosexual females reported their fathers to have been cold/rejecting. A discussion of the findings and suggestions for future research are given.

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INTRODUCTION

Hazan and Shaver's (1987) landmark study exploring romantic love as an attachment process has prompted considerable research. Their work was based on Bowlby's (1969, 1973, 1980) three-volume exploration of attachment, separation, and loss, and on infant-parent research conducted by Ainsworth, Blehar, Waters, and Wall (1978).

In the published literature on attachment and romantic relationships, the primary focus has been on heterosexual relationships. The assumption has been made that data from heterosexual samples generalizes to non-heterosexual populations. Thus, the purpose of the present investigation was to examine relations between attachment style, sexual orientation, and success/satisfaction in adult romantic relationships.

Attachment Theory

John Bowlby's attachment trilogy may be judged by historians to be the most significant psychological work to appear during the last half of this century. Attachment theory has prompted new concepts, new methods, and new ways of looking at basic phenomena in human development. Bowlby's work both integrates and transforms what went before, creating an alternative way of viewing the world while considering previous viewpoints (Bowlby, 1969, 1973, 1980; Sroufe, 1986).

Bowlby's major purpose was to describe and explain how infants become emotionally attached to their primary caregivers and emotionally distressed when separated from them (Bowlby, 1969, 1973, 1980; Hazan & Shaver, 1987). Two hypotheses are central to Bowlby's work. These are that the quality of any attachment relationship depends on the quality of care experienced with that partner, and that the quality of primary attachment relationships strongly influences early personality organization, especially the child's concept of self and others.

In his first volume, Bowlby (1969) presents a novel view of the infant-caregiver bond. According to this view, the disposition to become attached is an independent system built into primate biology to ensure survival.

The principal attachment figure and the other figures to whom a child becomes attached depends in part on who cares for him and on his household composition. In virtually every culture, attachment figures are most likely to be the child's natural mother, father, older siblings, or perhaps grandparents.

Bowlby argues that the quality of attachment is central. If the infant experiences responsive caregiving, he will develop an inner sense of self-confidence and self-worth. If responsive care is unavailable, sporadic, or disrupted, then insecurity and anxiety concerning close relationships are likely to follow. Bowlby assumes that the

primary attachment relationship serves as a prototype for later social relationships (Bowlby, 1969; Sroufe, 1986).

In the second volume of the attachment trilogy, Bowlby (1973) contends that in the evolutionary framework, anxiety (as well as anger) is a normal response to threats to the ongoing availability of the attachment figure. Emotional reactions to separation lead the infant to seek proximity and to signal distress so that the caregiver also will seek reunion. A second theme discussed involves the role of experience in determining the degree of security or anxiety. Bowlby argues that by the end of the first year the infant has begun to develop internal working models of self and others. The infant who is anxiously preoccupied about the accessibility of the caregiver has probably received inconsistent care. Bowlby also discusses the formation of personality and the development of self-reliance. The infant who experiences responsive care will internalize a model of self and of others as available and of the self as potent. In time, such children begin to believe they can prevail even in the face of distress or adversity. Anxiously attached children will be notably dependent in childhood. The self-confident child has an experiential base for that confidence (i.e., a history of reliably responsive care).

Bowlby's (1980) final volume addresses the topic of loss. He discusses how mourning is a normal reaction to the loss of a vital relationship. The loss of attachment

figures is important and may place the child at risk.

Research Examining the Mother-Infant Attachment

In 1969, Ainsworth and Wittig developed a paradigm to empirically study Bowlby's view of attachment in infant-mother dyads. Ainsworth and Wittig (1969) named this procedure the strange situation. The strange situation is a laboratory procedure in which several episodes, in fixed order, are intended to activate and/or intensify infants' attachment behavior. These episodes were designed to approximate situations that most infants commonly encounter in real life.

Specifically, the strange situation is a laboratory procedure designed to examine mother-infant attachment in ten- to 24-month-olds by gradually subjecting infants to increasing amounts of stress. Stress is induced by the novel setting, the entrance of an unfamiliar female, and two brief separations from the parent. According to Ainsworth, the stress associated with the strange situation should increase the infant's desire for proximity to and/or contact with the protective parent or attachment figure, thus leading to the intensification of attachment behaviors such as crying, approaching, and clinging. Thus, as the stress increases, infants should reduce their exploration and affiliation and increasingly organize their behavior around their parents. Infants should exhibit distress when separated from their parents, attempt to search for them,

and greet them with bids for renewed interaction either in the form of proximity/contact or in the form of distance interaction (Ainsworth et al., 1978; Lamb, 1988).

Attachment Styles. Based on their infant-parent research employing the strange situation, Ainsworth and colleagues (1978) identified three types of infant attachment styles. About 65-70% of American infants exhibit the secure pattern. Upon reunion, these infants greet the parent with a bid for renewed interaction. These infants seem to gain security and comfort from the parent to whom they turn in times of stress. Non-secure infants display one of two types of "insecure" reactions. Twenty to 25% of infants usually behave in an avoidant fashion (i.e., turning away from rather than toward the adult, particularly after reunion). The third group, the resistant (anxious/ambivalent) infants, comprise ten to 15% of most samples. These infants are unable to use the attachment figure as a base for exploration even in pre-separation episodes. Exploratory behavior is antithetical to attachment behavior in that it leads infants toward interesting features of their environment and thus usually away from the attachment figure. These infants behave in an ambivalent manner upon reunion. They both seek contact and angrily reject it when offered.

Sexual Orientation and Attachment

It has been assumed that the three primary attachment

styles distribute themselves similarly among heterosexuals and non-heterosexuals (e.g., Hazan & Shaver, 1987). In Hazan and Shaver's (1987) landmark study examining romantic love and the attachment process, only four percent of the total sample (N = 620) rated themselves as "primarily homosexual" and two percent rated themselves as "primarily bisexual." It is unlikely that the 37 individuals examined by Hazan and Shaver was a large enough sample to accurately represent the non-heterosexual population with regard to attachment style. Consequently, a purpose of the current study was to examine the distribution of attachment styles in various homosexual populations.

Phillip Shaver (personal correspondence, January 28, 1993) has stated that too few homosexual subjects were used to draw any firm conclusions and that it would be worthwhile to use specially selected samples. An additional reason to re-examine this issue is that more precise measures have been developed (Collins & Read, 1990; Simpson, 1990) to assess attachment style.

Sexual Orientation as a Continuum. Prior to the pioneering work of Dr. Alfred C. Kinsey, 'homosexual' and 'heterosexual' were viewed as dichotomous categories. Individuals were considered either heterosexual or homosexual. Some researchers allowed for a third category, bisexual, whereas others believed that a bisexual was a homosexual in disguise or a heterosexual who was

experimenting (Sanders, Reinisch, & McWhirter, 1990).

The world is not to be divided into sheep and goats. Not all things are black nor all things white. It is a fundamental of taxonomy that nature rarely deals with discrete categories. Only the human mind invents categories and tries to force facts into separated pigeon-holes. The living world is a continuum in each and every one of its aspects. The sooner we learn this concerning human sexual behavior the sooner we shall reach a sound understanding of the realities of sex (Kinsey, Pomeroy & Martin, 1948).

Based on the research of Kinsey and colleagues (1948) and Kinsey, Pomeroy, Martin, & Gebhard (1953) there appeared to be a continuum of sexuality (Kinsey employed a seven-point scale) from exclusively heterosexual to exclusively homosexual.

Distribution of Sexual Orientation. One of the major contributions of Kinsey's research was his challenge of the dichotomous categorization of sexual orientation. For example, Kinsey and colleagues (1948) reported that 50% of single, married, and previously married white men between the ages of 16 and 55 had responded erotically to other men, and 37% of all adult males had engaged in sexual activity with a male to the point of orgasm. This also included those who had an experience during adolescence.

Similarly, 28% of single, married, and previously married white women between the ages of 12 and 45 reported that they had responded erotically to women, and 13% had engaged in sexual activity with a female to the point of orgasm (Kinsey et al., 1953).

Ten percent of adult males consider themselves homosexual for at least three years between the ages of 16 and 55 (that is, they rate themselves five or six on the seven-point scale). Eight percent of adult males are exclusively homosexual (rate themselves a six on the seven-point scale) for at least three years between the ages of 16 and 55. After adolescence, four percent of all white males are exclusively homosexual throughout their lives (Kinsey et al., 1948).

With regard to females, between three and eight percent of the unmarried females in the sample, and something under one percent of the married females, had made homosexual responses and/or had homosexual experience more often than they had responded heterosexually (that is, they rated themselves from four to six on the seven-point scale) in each of the years between 20 and 35 years of age. Similarly, four to seven percent of previously married females had made homosexual responses and/or had homosexual experience more often than they had responded heterosexually (Kinsey et al., 1953).

Between two and six percent of the unmarried females in the sample, but less than one percent of the married females, had been more or less exclusively homosexual (that is, they rated themselves five or six on the seven-point scale) in their responses and/or overt experience in each of the years between 20 and 35 years of age. Among the

previously married females, one to six percent had been more or less exclusively homosexual (Kinsey et al., 1953).

As for exclusive homosexuality, between one and three percent of the unmarried females in the sample had been exclusively homosexual (that is, they rated themselves six on the seven-point scale) in their psychological responses and/or overt experience in each of the years between 20 and 35 years of age. Among the previously married females, one to three percent had been exclusively homosexual (Kinsey et al., 1953).

In the present study, the term sexual orientation was considered to be one's erotic and affectual preference (Finch, 1991). The term straight was used to label those individuals who are self-identified as having exclusively or predominantly heterosexual orientations. The terms gay and lesbian were used to label those individuals who are self-identified as having exclusively or predominantly homosexual orientations.

The Kinsey scale and modified versions thereof have been widely applied in sex research during the past 40 years. Some studies in the United States have reported similar results (e.g., Whitam & Mathy, 1985), whereas estimates from other studies have differed significantly. Hohman and Schaffner (1947) reported that one percent of males were homosexual (females were not sampled). In the only study to report homosexuality higher in females,

Gravitz (1970) reported that two percent of males and nearly five percent of females were strongly attracted to members of their own gender. Hunt (1974) found that one percent of males and one-half of one percent of females were exclusively homosexual.

An article appearing in a widely read news magazine estimated that, among adults in the United States, gay males constituted approximately 13% of the male population. This is believed to be three times the proportion of females who are lesbian (Newsweek, June 2, 1986, p. 55). A more recent study (Janus & Janus, 1993) estimates that nine percent of men and five percent of women may be considered homosexuals. We do not know for certain the percentage of homosexuals in the U.S. population, but it is apparent that this group constitutes a significant minority.

Romantic Love

The study of love has for many years been an area of interest in the field of psychology, but only in the last two decades has it become an acceptable area of study for psychologists. The increased interest in romantic love has been stimulated by the widespread interest in close relationships (Hendrick & Hendrick, 1989).

Theories of Love. Many theories of love have been developed (e.g., Hendrick & Hendrick, 1986; Lee, 1977; Rubin, 1970; Sternberg, 1986; Tennov, 1979). Also, each of these theorists has his or her own definition of "love."

What does it mean "to love" someone or "to be in love" with someone? These are the questions which must be asked when exploring the topic of romantic love. Each theory has its own accompanying measurement approach, and one must carefully choose the approach which best fits his or her area of research.

An initial assumption in this area of research was that love is an attitude held by a person toward another person, involving dispositions to think, feel, and behave in certain ways toward that other person (Newcomb, 1960). Love may be viewed as a multifaceted attitude, employing such varieties of attraction as liking, admiration, and respect.

In this paper, the term love was used to describe a preoccupation with another person, resulting in a deeply felt desire to be with this person (Pope, 1980). Romantic love was defined as love between two individuals, whether opposite-sex or same-sex, that leads to a long-term commitment.

In recent times, psychologists have attempted to replace intuitive accounts of love with empirically derived depictions of the nature of love. Perhaps most well known is the work of Rubin (1970, 1973). Rubin used psychometric methods to derive what he has called a Love Scale, which he distinguished from a Liking Scale that can be administered in conjunction with the Love Scale.

Romantic Love and Sexual Orientation. In research at UCLA, Peplau and Cochran (1980) studied groups of lesbians, gays, and straights who all were involved in romantic/sexual relationships. On a standardized love scale, lesbians and gay men generally reported high love for their partners, indicating strong feelings of attachment, caring, and intimacy. They also scored high on a liking scale, reflecting feelings of respect and affection toward their partners. There were no significant differences among lesbians, gay men, and straights on any of these measures. The current study further expanded this research by examining liking and loving according to sexual orientation and attachment style.

Romantic Love and Attachment. For each attachment style (secure, avoidant, anxious/ambivalent), Hazan and Shaver (1987) found that attachment style predicted a different experience of romantic love. Since this study, others have expanded the understanding of attachment and romantic love (Bartholomew, 1990, Bartholomew & Horowitz, 1991; Brennan, Shaver, & Tobey, 1991; Collins & Read, 1990; Feeney & Noller, 1991; Hazan & Shaver, 1990; Levy & Davis, 1988; Mikulincer & Erev, 1991; Pistole, 1989; Simpson, 1990). These studies suggest that attachment processes in early childhood provide a solid foundation for studies of adult love.

When the word love is used in a dispositional sense ("I

fell deeply in love with X"), it refers to a process related to what Bowlby (1969, 1973, 1980) and Ainsworth and colleagues (1978) called attachment. According to Bowlby's theory, attachment implies an enduring affectional bond. When love is viewed as an attachment process, it takes on considerable emotional complexity (Shaver & Hazan, 1988).

In this paper, the term affectional bond was used to describe a relatively long-lasting tie in which the partner is important as a unique individual and is interchangeable with none other. There is a desire to maintain closeness to the partner.

Despite similarities, adult love differs from simple attachment in at least two ways. First, sexual attraction and sexual behavior are components of adult romantic love. Second, adult love usually involves reciprocal caregiving (i.e., two partners serving as attachment figures for one another), as contrasted with infant-caregiver dyads, in which relationships are profoundly asymmetrical (Shaver & Hazan, 1988).

The term attachment is synonymous with the term affectional bond; therefore, an attachment figure is someone who cannot be replaced or exchanged for someone else, even though other attachments exist (Ainsworth, 1989).

According to Shaver and Hazan (1988), sexuality and reciprocal caregiving are conceptualized within ethology and therefore within attachment theory. Romantic love, viewed

from an attachment perspective, involves the integration of three behavioral systems: attachment, caregiving, and sexual mating. For the purpose of the current study, responsible sexual activity was used in place of sexual mating, so as not to discriminate against non-heterosexuals.

For purposes of this paper, the term secure was used to describe those individuals who find it easy to get close to others, are comfortable depending on them and vice versa, and rarely worry about being abandoned or someone getting too close to them (Hazan & Shaver, 1987). Specifically, secure attachment is associated with positive relationship characteristics such as intimacy and satisfaction and with high self-esteem (Feeney & Noller, 1991).

The term avoidant was used to describe those individuals who are somewhat uncomfortable being close to others, find it difficult to trust others completely, have difficulty depending on others, are nervous when anyone gets close, and feel that love partners want them to be more intimate than they are comfortable being (Hazan & Shaver, 1987). In addition, avoidant attachment correlates with less satisfying and committed relationships (Feeney & Noller, 1991).

The term anxious/ambivalent was used to describe those individuals who find others reluctant to get as close as they would like them to, worry that their partner does not really love them or will not want to stay with them. These

individuals want to merge completely with another person. The desire to immerse themselves with another may alienate a partner (Hazan & Shaver, 1987). With the exception of passion, anxious/ambivalent attachment also is inversely related to positive relationship characteristics such as intimacy, satisfaction, and high self-esteem (Feeney & Noller, 1991).

Relationship Satisfaction

The term relationship satisfaction was used to describe a composite of the sense that a romantic relationship is a success and that it meets one's needs, that one enjoys the other's company, finds one's feeling reciprocated and finds the relationship to enhance one's self-esteem (Levy & Davis, 1988). This description of relationship satisfaction was applied across the continuum of sexual orientation.

Due to the relative ease with which homosexuals can terminate their relationships and the relative absence of institutional barriers and supports that protect their relationships, homosexuals make intriguing subjects for tests of psychological models of relationship satisfaction (Kurdek, 1991). It is important to study homosexuals because of fundamental differences in the "societal" nature of their relationships.

Sexual Orientation and Relationship Satisfaction.

Numerous studies have examined satisfaction in lesbian and gay male relationships (e.g., Duffy & Rusbult, 1986; Jones &

Bates, 1978; Kurdek & Schmitt, 1986a, 1986b; Peplau, Padesky, & Hamilton, 1982). In general, research has found that most gay men and lesbians perceive their romantic relationships as satisfying. Moreover, homosexual and heterosexual couples matched on age and other relevant characteristics report similar levels of love and satisfaction (Peplau & Cochran, 1990).

Kurdek and Schmitt (1986a) have compared samples of lesbian, gay, and straight cohabiting and married couples. They found no significant differences among groups on measures of love or relationship satisfaction, with the exception that straight cohabitators scored lower on measures of love and relationship satisfaction than the other three groups. Kurdek (1988) found that lesbian couples reported higher relationship satisfaction than did gay couples. This could reflect the hypothesized larger proportion of lesbians, as opposed to gay males, who fall into the secure attachment realm. In addition, this could also reflect homosexual males' preference for sexual variety (Bell & Weinberg, 1978).

Relationship Success

Success in romantic relationships is difficult to define. Literature examining success in relationships rarely operationally defines success in terms of any one single variable. (e.g., Sternberg & Grajek, 1984; Sternberg, 1986). Instead, relationship success is defined in terms of

multiple variables.

In the research of Sternberg and Grajek (1984), many scales were employed in hopes of identifying predictors of relationship success. Among the scales used were a love scale, a liking scale, an interpersonal involvement scale, a similarity rating, a complementarity rating, and a host of others. It was determined that good prediction of relationship success could be obtained for combined genders from just four predictor measures: The Rubin Liking Scale, a complementarity rating, a depression inventory, and a measure of physical attractiveness. Moreover, it was found that scores on the Rubin Liking Scale (Rubin, 1970) were the significant predictors of relationship success.

The present research adopted an identical definition of relationship success as posed by Sternberg and Grajek (1984). Relationship success was defined in terms of an unweighted composite of subjects' ratings of satisfaction, intensity, significance, and need satisfaction pertinent to their most recent or most important relationship with a lover.

Relationship Success and Sexual Orientation. Past research has failed to address the issue of relationship success as it pertains to the entire sexual continuum. As with heterosexual samples, previous research has focused mainly on relationship satisfaction as opposed to relationship success. The current study addressed both

relationship satisfaction and relationship success.

Relationship Success and Attachment Style. There is no existing literature on relationship success and attachment style per se. Past researchers have, at times, viewed satisfaction and success in relationships as identical. This, however, may not be the case. Thus, in the present study, the issue of success in relationships (in addition to satisfaction) was studied as it relates to attachment style and sexual orientation.

General Hypotheses

The purpose of the present investigation was to explore the relationships among attachment styles, sexual orientation, and success/satisfaction in adult romantic relationships. The methodology of this investigation examined differences between heterosexuals, gay males and lesbians on a variety of self-report measures.

The first set of hypotheses was concerned with the relationship between sexual orientation and attachment style. Previous researchers (Bartholomew & Horowitz, 1991; Collins & Read, 1990; Feeney & Noller, 1991; Hazan & Shaver, 1987; Hazan & Shaver, 1990; Levy & Davis, 1988; Mikulincer & Erev, 1991; Shaver & Hazan, 1988; Simpson, 1990) have failed to address this issue, mainly because it has been assumed that attachment styles distribute themselves similarly among heterosexuals and non-heterosexuals (Shaver, personal correspondence, 1993). Other researchers (Pistole, 1989;

Feeney & Noller, 1990) have suggested that a secure attachment style is indicative of greater satisfaction in relationships. Also, lesbians have been found to report more relationship satisfaction than gay males (Kurdek, 1988, 1989). Therefore, a sexual orientation by gender interaction was hypothesized. It was expected that lesbians would report a significantly higher incidence of the secure attachment style than would gay males, but neither would report a higher incidence of the secure attachment style than would heterosexual males or heterosexual females. For heterosexuals, attachment styles were expected to distribute themselves as reported in previous research: 65-70% secure, 20-25% avoidant, and ten to 15% anxious/ambivalent (Ainsworth et al., 1978).

The second group of hypotheses was concerned with the relationship between sexual orientation and satisfaction in adult romantic relationships. As previously stated, Kurdek (1988, 1989) has reported that lesbians report greater relationship satisfaction than gay males. In contrast, Duffy and Rusbult (1986) reported no differences between gay and lesbian couples. Studies including lesbian couples and heterosexual couples have found no differences between these groups in the degree of reported satisfaction (Cardell, Finn, & Maracek, 1981; Kurdek & Schmitt, 1986a; Ramsey, Latham, & Lindquist, 1978). Studies of relationship satisfaction among gay males is scarce; however, previous

studies (e.g., Kurdek & Schmitt, 1986b) have found marked similarities in the nature and correlates of relationship quality between homosexual and heterosexual couples. A main effect for forced choice attachment style was hypothesized for relationship satisfaction. Individuals of the secure attachment style were expected to report greater relationship satisfaction than individuals of the two insecure attachment styles (avoidant and anxious/ambivalent). A sexual orientation-by-gender interaction was hypothesized for relationship satisfaction. Heterosexual males and heterosexual females were expected to report significantly greater relationship satisfaction than were lesbians who were expected to report significantly greater relationship satisfaction than gay males. A sexual orientation-by-gender-by-attachment style interaction also was hypothesized for relationship satisfaction. Across the attachment style continuum, measures of satisfaction were not expected to remain constant for heterosexual males, heterosexual females, gays and lesbians. Heterosexual males, heterosexual females and lesbians were expected to report very similar relationship satisfaction for respective attachment styles, whereas gay males were expected to report significantly less relationship satisfaction for respective attachment styles. Graphically, the line depicting gay males' satisfaction across the attachment styles should be considerably lower than heterosexual males, heterosexual

females and lesbians.

The third set of hypotheses was concerned with sexual orientation and relationship success (as defined by Sternberg & Grajek, 1984). A main effect for forced choice attachment style was hypothesized for relationship success. Individuals of the secure attachment style were expected to report greater relationship success than individuals of the two insecure attachment styles (avoidant and anxious/ambivalent). A sexual orientation-by-gender interaction was hypothesized for relationship success. Heterosexual males and heterosexual females were expected to report significantly greater relationship success than were lesbians who were expected to report significantly greater relationship success than gay males. A sexual orientation-by-gender-by-attachment style interaction also was hypothesized for relationship success. Across the attachment style continuum, measures of relationship success were not expected to remain constant for heterosexual males, heterosexual females, gays and lesbians. Heterosexual males, heterosexual females and lesbians were expected to report very similar relationship success for respective attachment styles, whereas gay males were expected to report significantly less relationship success for respective attachment styles. Graphically, the line depicting gay males' relationship success across the attachment styles should be considerably lower than heterosexual males,

heterosexual females and lesbians.

The final set of hypotheses addressed parental caregiving styles and adult attachment styles. It was hypothesized that individuals reporting a secure attachment style would perceive their parents to have been warm and not rejecting. Likewise, individuals reporting an anxious attachment would report their parents to have been cold or inconsistent.

METHOD

Subjects

Subjects comprised 55 heterosexual males, 49 heterosexual females, 56 homosexual males, and 35 homosexual females. Subjects ranged in age from 18 years to 44 years ($M = 26.02$, $SD = 5.67$). Ethnic background of subjects was 84.1% white, 7.7% African-American, 4.1% Asian, .5% Native American, .5% Hispanic, 2.1% other and 1% unclassified. Occupations of subjects were 46.1% college student and 53.9% non-student. Subjects had a mean education of 15.63 years ($SD = 2.47$).

All subjects were single and were screened for the type of relationship in which they were involved at the time of this research. Subjects responded to the questionnaire packet based on either their current relationship (74.4%) or their most significant past relationship (25.6%). Mean relationship duration for subjects responding based on their current partner was 121.68 days; mean relationship duration for subjects responding based on their most significant past relationship was 140.19 days.

Subjects were recruited from undergraduate psychology classes, meetings of gay and lesbian student organizations, advertisements in a local gay newspaper, church groups, computer bulletin board postings and personal contacts. Subjects recruited from psychology classes received research

credit toward course grades in exchange for participation in this study. Subjects recruited from university gay and lesbian organizations, church groups, computer networking and personal contacts participated strictly on a volunteer basis.

Subjects were assigned to groups based on their self-reported gender, sexual orientation and attachment style as determined by Hazan and Shaver's Attachment Style Measure (1987) and a multi-item scale measuring dimensions underlying adult attachment styles (Collins & Read, 1990).

Sexual orientation was determined by asking subjects to circle a number from zero (exclusively heterosexual) to six (exclusively homosexual). This sexual orientation scale (see Appendix B) is similar to a scale developed by Kinsey and colleagues (1948). For the purpose of this study, heterosexual subjects were those persons who rated themselves as exclusively or predominantly heterosexual (i.e., a Kinsey rating of 0, 1, or 2). Homosexual subjects were those persons who rated themselves as exclusively or predominantly homosexual (i.e., a Kinsey rating of 6, 5, or 4). Subjects who rated themselves as bisexual (a Kinsey rating of three, indicating that they are equally heterosexual and homosexual) were excluded from the study.

Measures

Subjects were either mailed a questionnaire packet or picked up a packet from the Department of Psychology at Old

Dominion University. Questionnaires were arranged in the following order to include: 1) a sexual orientation measure, 2) attachment style measures, 3) relationship satisfaction measures, 4) liking and loving scales, 5) single-item measures of relationship quality, 6) a depression measure, 7) a measure of body satisfaction and physical attractiveness, 8) an anxiety measure, and 9) a general information sheet (see Appendix P).

Hazan and Shaver Attachment Style Measure (ASM). The ASM (see Appendix D) is a three-item forced choice measure developed by Hazan and Shaver (1987). The ASM was derived by applying Bowlby's (1969, 1973, 1980) and Ainsworth's (1978) ideas and findings about infant attachment styles to the domain of adult love. Each item describes one of the three attachment styles (i.e., secure, avoidant, or anxious/ambivalent) in terms of how an individual of that particular attachment style would feel in a romantic relationship. In Hazan and Shaver's (1987) study first employing this measure, just over one-half of the subjects (56%) classified themselves as secure. The other one-half was split fairly evenly between the avoidant and anxious/ambivalent categories (25% and 19%, respectively). These figures were similar to the proportions reported in American studies of infant-mother attachment (Campos, Barrett, Lamb, Goldsmith, & Sternberg, 1983, summarized the proportions obtained in these studies as 62% secure, 23%

avoidant, and 15% anxious/ambivalent).

Adult Attachment Scale (AAS). The AAS (see Appendix E) is an 18-item self-report measure designed by Collins and Read (1990). The construction of this scale was based upon Hazan and Shaver's (1987) adult attachment descriptions of the three attachment styles. The AAS was designed to be a sensitive measurement of adult attachment styles. Hazan and Shaver's attachment style vignettes were dissected into their component statements, each forming one scale item (a total of 15). Three additional statements, each characterizing one of the three attachment styles with respect to confidence in the availability and dependability of others, were added to the initial 15 items derived from Hazan and Shaver's (1987) scale, for a total of 18 statements (six items for each attachment style). Responses to statements were made on a five-point scale ranging from 1) not at all characteristic to 5) very characteristic. The AAS is comprised of three scales: Dependability (e.g., "I find it difficult to allow myself to depend on others.", "I know that others will be there when I need them."), Anxiety (e.g., "I do not often worry about being abandoned.", "I often worry my partner will not want to stay with me."), and Closeness (e.g., "I find it relatively easy to get close to others.", "I am nervous when anyone gets close.").

Collins and Read (1990) suggest that the AAS offers practical and theoretical advantages over Hazan and Shaver's

(1987) discrete measure. By measuring underlying dimensions, a more sensitive measure of adult attachment is obtained. In addition, Collins and Read (1990) suggest that the AAS yields a more precise definition of the three attachment styles.

In the Collins and Read study, scale items were factor analyzed and initial orthogonal rotation produced a number of items which loaded on more than one factor, suggesting that the underlying dimensions might be correlated. Oblique rotation supported this. Cronbach's alphas for the Dependability, Anxiety, and Closeness items were all reasonable: 0.75, 0.72, and 0.69 respectively. Test-retest correlations for Closeness, Dependability, and Anxiety were 0.68, 0.71, and 0.52 respectively (Collins & Read, 1990).

Parental Caregiving Style Scale (PCSS). The PCSS (see Appendix F) is a trichotomous forced choice item designed by Hazan and Shaver (1986) to assess perceptions of attachment history with parents. Three vignettes were developed. The first describes a warm/responsive parent (e.g., "She/he was generally warm and responsive.", "Our relationship was almost always comfortable."). The second describes a cold/rejecting parent (e.g., "She/he was fairly cold and distant, or rejecting, not very responsive.", "It's possible that she/he would just as soon not have had me."), and the third describes an ambivalent/inconsistent parent (e.g., "She/he was noticeably inconsistent in her/his actions to

me.", "She/he definitely loved me but didn't always show it in the best way."). The vignettes are in accordance with childhood attachment as described by Ainsworth and colleagues (1978). Each subject was instructed to choose the vignette which best described their mother figure/father figure during the subject's childhood.

Using a nine-point scale, subjects rated the extent to which each description characterized their relationship with his/her parents while they were growing up (see Collins & Read, 1990). As with the AAS, it is believed that a dimensional approach to the PCSS will yield a more sensitive and precise measure. The PCSS has only been used in two published studies (Collins & Read, 1990; Kirkpatrick & Shaver, 1990). Collins and Read (1990) correlated these parental caregiving styles with scores on the Closeness, Dependability, and Anxiety items of the AAS. Subjects who perceived their relationship with their mother and father as warm and not rejecting were more likely to feel they could depend on others and less likely to be anxious about being abandoned or unloved. Subjects who remembered their mother as being warm and responsive were more comfortable with closeness and intimacy. Ambivalent/inconsistent mothering was associated with low scores on Dependability and higher scores on Anxiety. In general, individuals with a secure attachment style perceived their parents to have been warm and not rejecting, whereas individuals with an anxious

attachment style reported their parents to have been cold or inconsistent. Kirkpatrick and Shaver (1990) have used the PCSS in a study of childhood attachments and religious beliefs.

Kansas Marital Satisfaction Scale (KMS). The KMS (see Appendix G) is a three-item measure developed by Schumm, Paff-Bergen, Hatch, Obiorah, Copeland, Meens, and Bugaighis (1986) to assess global relationship satisfaction. This scale requires subjects to rate on a seven-point scale ranging from 1) extremely dissatisfied to 7) extremely satisfied. These statements are global evaluations of the relationship (e.g., "I am satisfied with my relationship."), the partner (e.g., "I am satisfied with my partner in his/her role as my partner."), and the relationship with the partner (e.g., "I am satisfied with my relationship with my partner."). Scores from the three statements are summed to arrive at a composite score. Schumm and colleagues (1986) reported a coefficient alpha of 0.93. Recent research (Kurdek, 1991) has reported similar internal reliability (0.97 to 0.98). The KMS scale seems to assess one dimension of relationship quality (satisfaction) with enough items to estimate internal consistency reliability and to detect subtle differences in sources of satisfaction. The discriminant validity of the KMS remains disputable, but it does exhibit face validity and demonstrates some degree of concurrent validity. Specifically, Schumm and colleagues

(1986) found that the KMS correlated with the Dyadic Adjustment Scale (Spanier, 1976) and the Quality Marriage Index (Norton, 1983). Kurdek (1991) used the KMS to examine relationship satisfaction in heterosexuals and homosexuals; therefore, it appeared to be a measure for use in the current study.

Index of Marital Satisfaction (IMS). The IMS (see Appendix H) is a 25-item scale developed by Hudson (1981) to assess the degree or magnitude of a problem in a relationship between spouses or partners. Statements are responded to on a five-point scale ranging from 1) rarely or none of the time to 5) most all of the time. Included in the scale are such statements as "I feel that my partner really cares for me," and "I feel that there is excitement in our relationship." Hudson (1981) reported a coefficient alpha of at least 0.90 for this scale, as well as good face, content, construct, and discriminant validity. Berger (1990) has used this scale in a study of the quality of same-sex couple relationships. Using a homosexual sample, he reported a coefficient alpha of 0.93. In the current study, a 23-item modified version of the IMS was used. From the original scale, Item 17 ("I feel that we do a good job of managing our finances") and Item 18 ("I feel that I should never have married my partner") were removed because of item content.

Love and Liking Scales. Two 13-item scales, one of

love and the other of liking (see Appendices I & J), were developed by Rubin (1970) to reflect aspects of one person's attitudes toward another person. The 13 items on each scale were part of larger pool of items and were selected by factor analytic procedures.

The content of the two scales corresponds closely to conceptions of liking and loving. The love scale includes items that seem to tap the postulated components of attachment (e.g., "If I were lonely, my first thought would be to seek _____ out."), caring (e.g., "If _____ were feeling bad, my first duty would be to cheer him/her up."), and intimacy (e.g., "I feel that I can confide in _____ about virtually everything"). The items on the liking scale focus on such dimensions as adjustment, maturity, good judgment, intelligence, and on the tendency to view the other person as similar to oneself. Examples of statements on the Liking Scale are "When I am with _____, we almost always are in the same mood," and "I feel that _____ is an extremely intelligent person." Items are responded to on a nine-point scale, ranging from 1) disagree completely to 9) agree completely. Scores on each scale are summed to form the two composite scores.

The Love Scale has high internal consistency. Rubin (1970) reported a coefficient alpha of 0.84 for women and 0.86 for men; coefficient alpha of the Liking Scale was 0.81 for women and 0.83 for men. Both scales appear to have face

validity. The Love Scale was only moderately correlated with the Liking Scale, which helped demonstrate the construct validity of the measures. Construct validity of the Love Scale was further attested to by the findings that love for one's dating partner was only slightly correlated with love for one's same-sex friend (Rubin, 1970).

Single-Item Measures. All subjects were asked to rate the quality of their relationship on seven-point scales ranging from 1) low to 7) high on the following dimensions: intensity, significance, similarity of partners, complementarity of partners, extent of lover's satisfaction of subject's needs, subject's self-esteem during the relationship, and overall satisfaction with the relationship (see Appendix K).

Beck Depression Inventory (BDI). The BDI (see Appendix L) is a 21-item scale designed by Beck, Ward, Mendelson, Mock, and Erbaugh (1961) to measure the behavioral manifestations of depression. The items on the BDI were primarily clinically derived and are composed of 21 categories of symptoms and attitudes. Items on the BDI are responded to on a four-point scale for each symptom-attitude ranging from 0) none to 3) severe to indicate the degree of severity. Items on the BDI reflect such symptoms-attitudes as mood (e.g., "I feel sad."), crying (e.g., "I cry more now than I used to."), and loss of libido (e.g., "I have lost interest in sex completely"). A composite score is derived

by summing the scores for all 21 items.

Beck and colleagues (1961) used two methods for assessing the internal consistency of the BDI. First, the protocols of 200 consecutive cases were analyzed. Scores for each of the 21 categories were compared with the total score on the BDI for each patient. A Kruskal-Wallis Non-Parametric Analysis of Variance by Ranks demonstrated that all categories exhibited a significant relationship to the total score for the inventory. Significance was beyond the 0.001 level for all categories except the weight-loss category, which was significant at the 0.01 level.

A second evaluation of internal consistency was performed using split-half reliability. Ninety-seven cases were selected for analysis. The Pearson r between the odd and even categories yielded a reliability coefficient of 0.86; with a Spearman-Brown correction, the coefficient rose to 0.93 (Beck et al., 1961).

Highly significant correlations between scores on the BDI and clinical ratings of other depression scales attest to the validity of this instrument (Beck et al., 1961).

Body Area Satisfaction Scale (BASS). The BASS (see Appendices M & N) is a nine-item version of the 25-item Body Parts Satisfaction Scale designed by Berscheid and colleagues (1973). The construction of this scale was based upon Bohrnstedt's (1977) factor analysis of the original scale and the survey research of Cash and colleagues (1986).

The items of the BASS assess satisfaction with nine areas: Face (facial features, complexion), Hair (color, thickness, texture), Lower Torso (buttocks, hips, thighs, legs), Mid-Torso (waist, stomach), Upper Torso (chest or breasts, shoulders, arms), Muscle Tone, Weight, Height, and Overall Appearance. Each of these items is rated on a five-point scale ranging from 1) very dissatisfied to 5) very satisfied. The composite body-satisfaction index is the mean of the first eight items. Cash and Brown (1989) have reported Cronbach's alphas of 0.79 for men and 0.78 for women (cited in Finch, 1991). Validity of this scale has been supported by numerous investigations (see Finch, 1991).

State-Trait Anxiety Inventory (STAI). The STAI (see Appendix O) is a self-report test in which subjects rate the intensity or frequency of their feelings (anxiety). The scale was developed in 1970 by Spielberger, Gorsuch, and Lushene. The STAI is based on a theoretical distinction between state and trait anxiety. The STAI consists of 20 items that assess how a person feels at the present time (state anxiety) and 20 items to assess how a person generally feels (trait anxiety). Subjects indicate the intensity or frequency of their anxiety using a four-point scale ranging from 1) not at all to 4) very much. Examples of statements for the A-State are "I feel calm" and "I feel secure"; for the A-Trait scale examples are "I wish I could be as happy as others seem to be" and "I am calm, cool, and

collected." Two scores are provided by adding the responses to the A-State and A-Trait items.

Spielberger and colleagues (1970) report internal consistency reliabilities of 0.83 to 0.92 for A-State scores and 0.86 to 0.92 for A-Trait scores. The test-retest reliabilities demonstrate that the A-Trait scores are more reliable over time than are the A-State scores. This would be expected from the definitions of state and trait anxiety. A-State scores correlated in the low 0.30s whereas A-Trait scores correlated in the 0.70s. Many studies have supported the construct validity of the STAI; A-State scores increase under stress, whereas A-Trait scores remain largely unchanged. In the present study, only the A-State scale was administered because it has been shown to be a predictor of relationship success (Sternberg & Grajek, 1984).

Procedure

All volunteers were informed in advance that their participation was voluntary, and that they were free to withdraw at any time. For psychology students, an informed consent sheet was completed and signed. These subjects were assured that their anonymity would be maintained through the use of numerical codes, and that the confidentiality of the information and responses they provide would be maintained. For all other subjects, implied consent was used. By completing and returning the questionnaire packet, subjects implied their consent to participate in this research.

Psychology students participating in this study returned questionnaire packets to the peer advisor for the Psychology Department. Other participants in this study mailed questionnaire packets to the Old Dominion University Department of Psychology in a postage pre-paid envelope.

RESULTS

Reliability of Measures

All measures used in this study were evaluated to determine if they had adequate reliability. Cronbach's alphas were computed for each of the multi-item scales to assess their internal consistencies. This procedure was performed separately for each of four groups: heterosexual males, heterosexual females, homosexual males, and homosexual females. Reliability measures are presented in Table 1.

On the Adult Attachment Scale, the Cronbach's alphas ranged from .78 for male heterosexuals to .83 for female heterosexuals (with a mean of .81) on the Depend subscale. Cronbach's alphas ranged from .74 for female homosexuals to .81 for female heterosexuals (with a mean of .78) on the Anxiety subscale. Cronbach's alphas ranged from .81 for male heterosexuals to .86 for male homosexuals (with a mean of .83) on the Close subscale.

On the Kansas Marital Satisfaction scale, Cronbach's alphas ranged from .93 for heterosexual males to .97 for heterosexual females (with a mean of .95). Cronbach's alphas for the Index of Marital Satisfaction ranged from .85 for heterosexual females to .91 for homosexual females (with a mean of .88). Cronbach's alphas for the Rubin Love Scale ranged from .83 for homosexual females to .88 for homosexual

Table 1

Internal Consistencies (Cronbach's alphas) of Multi-Item Measures by Sexual Orientation and Gender

Measure	Gender	Heterosexual	Homosexual
DEPEND Subscale of AAS	Male	.78	.79
	Female	.83	.82
ANXIETY Subscale of AAS	Male	.76	.81
	Female	.81	.74
CLOSE Subscale of AAS	Male	.81	.86
	Female	.81	.83
Kansas Marital Satisfaction	Male	.93	.90
	Female	.85	.91
Index of Marital Satisfaction	Male	.87	.94
	Female	.97	.94
Love Scale	Male	.85	.88
	Female	.87	.83
Liking Scale	Male	.93	.94
	Female	.91	.94
Beck Depression Inventory	Male	.81	.91
	Female	.74	.91
Body Area Satisf. Scale (Self)	Male	.80	.80
	Female	.84	.88
Body Area Satisf. Scale (Partner)	Male	.85	.87
	Female	.82	.89
STAI (State)	Male	.89	.95
	Female	.89	.87

males (with a mean of .86). Cronbach's alphas on the Rubin Liking Scale ranged from .91 for heterosexual females to .94 for homosexual males and homosexual females (with a mean of .93). Cronbach's alphas on the Beck Depression Inventory ranged from .74 for heterosexual females to .91 for homosexual males (with a mean of .84). Cronbach's alphas for the Body Area Satisfaction Scale (self) ranged from .80 for heterosexual males and homosexual males to .88 for homosexual females (with a mean of .83). Cronbach's alphas for the Body Area Satisfaction Scale (partner) ranged from .82 for heterosexual females to .89 for homosexual females (with a mean of .86). Cronbach's alphas on the State-Trait Anxiety Inventory (State only) ranged from .87 for homosexual females to .95 for homosexual males (with a mean of .90).

Sexual Orientation and Attachment Style

It was hypothesized that lesbians would report a significantly higher incidence of the secure attachment style than would gay males, but neither would report a higher incidence of the secure attachment style than would heterosexual males and heterosexual females.

A chi-square analysis was performed to determine if significant differences existed between groups on the type of attachment reported (secure, avoidant, anxious/ambivalent). The chi-square analysis was not significant ($\chi^2 = 5.50$, $df = 6$, $p = .48$). Table 2 reports

the percentages of attachment styles reported by each group.

The Collins and Read Adult Attachment Scale had not been previously used with gay and lesbian populations, thus, principal components factor analyses using a varimax rotation were performed on the Collins and Read Adult Attachment Scale. Analyses were performed for each group separately (see Tables 3-6). For each group, factor analysis confirmed the presence of three dimensions of attachment. The three dimensions were: Depend, Close, and Anxiety. In assessing scale items, the cut-off used to determine factor inclusion was .30.

For heterosexual males, Eigenvalues were 5.1 (Depend), 3.0 (Close), and 1.6 (Anxiety). The amount of variance accounted for was 29%, 17%, and 9%, respectively.

For heterosexual females, Eigenvalues were 5.8 (Depend), 3.2 (Anxiety), and 1.5 (Close). The amount of variance accounted for was 32%, 18%, and 9%, respectively.

For homosexual males, Eigenvalues were 6.0 (Close), 3.2 (Depend), and 1.5 (Anxiety). Percentage of variance accounted for was 33%, 18%, and 8%, respectively.

For homosexual females, Eigenvalues were 5.7 (Close), 3.7 (Depend), and 1.5 (Anxiety). Percentage of variance accounted for was 32%, 19%, and 8%, respectively.

Each subject received three composite scores: Depend, Anxiety, and Close. A mean score for each of the three subscales was computed for each subject. Because the number

Table 2

Sexual Orientation x Gender Endorsement of Attachment Styles
From Hazan and Shaver Attachment Style Measure

Sexual Orientation x Gender		Secure	Avoidant	Anxious/ Ambivalent
Heterosexual Male	(n=55)	49%	35%	16%
Heterosexual Female	(n=49)	59%	25%	16%
Homosexual Male	(n=56)	39%	39%	22%
Homosexual Female	(n=35)	51%	37%	12%

Table 3

Factor Analysis of Collins and Read Adult Attachment Scale -
Group 1: Heterosexual Males

Item #	Factor I	Factor II	Factor III
1	.35	.53	-.02
2	.80	.15	-.15
3	.37	.36	.27
4	.59	.17	.22
5	.72	.23	-.11
6	.75	.14	-.21
7	.01	.00	.21
8	-.30	-.02	.72
9	-.21	-.11	.73
10	-.34	-.01	.76
11	.42	.34	.56
12	.19	.02	.76
13	.20	.34	-.03
14	.04	.72	-.07
15	.39	.74	-.15
16	.27	.80	-.10
17	-.04	-.23	.04
18	.02	.71	.22

Note. For heterosexual males, Factor I was Depend,
 Factor II was Close, and Factor III was Anxiety.

Any item loading on more than one factor was
 included on the factor in which it had the
 highest loading.

Table 4

Factor Analysis of Collins and Read Adult Attachment Scale -
Group 2: Heterosexual Females

Item #	Factor I	Factor II	Factor III
1	.40	.13	.60
2	.76	-.20	.12
3	.66	-.11	.35
4	.60	-.27	.43
5	.45	-.19	.62
6	.58	-.38	.43
7	-.45	.52	.25
8	-.23	.78	-.15
9	-.14	.71	.14
10	-.20	.79	-.07
11	.32	.62	.11
12	.03	.78	-.14
13	.64	.15	.41
14	.70	-.00	.02
15	.26	.15	.80
16	.10	-.12	.81
17	.14	-.03	.02
18	-.16	.17	.62

Note. For heterosexual females, Factor I was Depend, Factor II was Anxiety, and Factor III was Close.

With one exception, any item loading on more than one factor was included on the factor in which it had the highest loading. Item 13 ("I find it relatively easy to get close to others") was included on the Close subscale.

Table 5

Factor Analysis of Collins and Read Adult Attachment Scale -
Group 3: Homosexual Males

Item #	Factor I	Factor II	Factor III
1	.57	.54	.06
2	-.12	.81	-.29
3	.50	.54	-.15
4	.25	.78	-.01
5	.40	.69	-.11
6	.12	.53	-.20
7	-.34	-.10	.57
8	-.15	-.13	.88
9	.39	-.37	.53
10	-.20	-.22	.87
11	.02	.03	.03
12	.10	-.18	.32
13	.62	.44	-.16
14	.59	.21	-.38
15	.83	.19	-.15
16	.88	.06	-.12
17	.60	.04	-.09
18	.49	.19	-.00

Note. For homosexual males, Factor I was Close, Factor II was Depend, and Factor III was Anxiety.

Any item loading on more than one factor was included on the factor in which it had the highest loading.

Table 6

Factor Analysis of Collins and Read Adult Attachment Scale -
Group 4: Homosexual Females

Item #	Factor I	Factor II	Factor III
1	.65	.50	-.06
2	.24	.48	-.28
3	.42	.67	-.05
4	.436	.439	-.26
5	.14	.21	.05
6	.37	.39	.20
7	-.21	-.13	.72
8	.12	-.73	.42
9	.18	-.07	.12
10	.05	-.75	.23
11	.23	-.10	.82
12	-.00	-.19	.81
13	.24	.78	.08
14	.56	.10	.49
15	.88	.19	.03
16	.88	.21	-.15
17	.62	-.07	.09
18	.60	-.14	.19

Note. For homosexual females, Factor I was Close, Factor II was Depend, and Factor III was Anxiety.

Any item loading on more than one factor was included on the factor in which it had the highest loading.

Items 8 and 10 had negative loadings; therefore, scores for these items were reversed.

of items retained for each subscale was not the same for each sexual orientation x gender group, this method was used.

For example, since the Anxiety subscale contained only five items (as opposed to six from the original version of the scale) for heterosexual males, the sum of those five items was divided by five to obtain a mean score for the subscale. Scores were reversed for those items which loaded negatively based on factor analysis. This method was used to compute subscale scores (means) for each sexual orientation x gender group so that means were being compared to means for all groups.

A 2 (sexual orientation) x 2 (gender) Analysis of Variance (ANOVA) was performed for the Depend subscale of the Collins and Read Adult Attachment Scale (see Table 7). A significant sexual orientation x gender interaction was found for the Depend subscale, $F(1, 191) = 3.90, p = .050$. A Student Newman Keuls procedure revealed that adult homosexual males ($M = 3.06, SD = .82$) were significantly different from both adult heterosexual females ($M = 3.44, SD = .90$) and adult homosexual females ($M = 3.65, SD = .72$), indicating that adult heterosexual females and adult homosexual females report finding it significantly easier than adult homosexual males to depend on others.

A significant main effect for gender was found for the Depend subscale, $F(1, 191) = 7.62, p < .01$, indicating adult

Table 7

2 (Sexual Orientation) x 2 (Gender) ANOVA for Depend
Subscale of Collins and Read Adult Attachment Scale

Source	<u>F-ratios</u>	Hetero- sexual Males	Hetero- sexual Females	Homo- sexual Males	Homo- sexual Females
		Mean	Mean	Mean	Mean
		SD	SD	SD	SD
Sexual Orient.	.32	3.33	3.44	3.06	3.65
Gender	7.62**	.79	.90	.82	.75
Sexual Orient. x Gender	3.90 ^a				

Note. df are (1, 191)

^ap = .05

**p < .01

females ($M = 3.53$, $SD = .83$) report significantly less difficulty than adult males ($M = 3.20$, $SD = .83$) depending on others.

A 2 (sexual orientation) x 2 (gender) ANOVA was performed on the Anxiety subscale of the Collins and Read Adult Attachment Scale (see Table 8). A significant sexual orientation by gender interaction was found for the Anxiety subscale, $F(1, 190) = 5.26$, $p < .05$. A Student Newman Keuls procedure, however, revealed no significant differences between groups. T -tests were also performed on each possible sexual orientation by gender combination to confirm the aforementioned. Again, no significant differences between groups were found. Tests for main effects were also non-significant.

A 2 (sexual orientation) x 2 (gender) ANOVA was performed on the Close subscale of the Collins and Read Adult Attachment Scale (see Table 9). A significant main effect for gender was found for the Close subscale $F(1, 190) = 3.92$, $p < .05$, indicating that adult females ($M = 3.61$, $SD = .86$) report significantly less difficulty than adult males ($M = 3.34$, $SD = .86$) in becoming close to others.

A significant main effect for sexual orientation was found for the Close subscale $F(1, 190) = 3.64$, $p < .06$, indicating that adult heterosexuals ($M = 3.58$, $SD = .83$) report significantly less difficulty than adult homosexuals

Table 8

2 (Sexual Orientation) x 2 (Gender) ANOVA for Anxiety
Subscale of Collins and Read Adult Attachment Scale

Source	<u>F-ratios</u>	Hetero- sexual Males	Hetero- sexual Females	Homo- sexual Males	Homo- sexual Females
		Mean	Mean	Mean	Mean
		SD	SD	SD	SD
Sexual Orient.	.05	2.39	2.65	2.69	2.31
Gender	.04	.84	1.00	.95	1.06
Sexual Orient. x Gender	5.26*				

Note. df are (1, 190)

*p < .05

Table 9

2 (Sexual Orientation) x 2 (Gender) ANOVA for Close Subscale of Collins and Read Adult Attachment Scale

Source	<u>F-ratios</u>	Hetero- sexual Males	Hetero- sexual Females	Homo- sexual Males	Homo- sexual Females
		Mean	Mean	Mean	Mean
		SD	SD	SD	SD
Sexual Orient.	3.64 ^b	3.46	3.71	3.22	3.48
Gender	3.92*	.83	.82	.89	.91
Sexual Orient. x Gender	.001				

Note. df are (1, 190)

^bp < .06

*p < .05

(\bar{M} = 3.32, SD = .90) in becoming close to others.

Relationship Satisfaction

It was hypothesized that heterosexual males and heterosexual females would report higher relationship satisfaction than homosexual females who would report greater relationship satisfaction than homosexual males. Two satisfaction measures were used in the present study: the Kansas Marital Satisfaction Scale (KMS) and the Index of Marital Satisfaction (IMS), both of which have been used with homosexual populations.

Individuals endorsing the secure attachment style were hypothesized to experience greater relationship satisfaction than individuals endorsing either of the two insecure attachment styles. An interaction effect for sexual orientation, gender, and attachment style was also hypothesized.

A 2 (sexual orientation) x 2 (gender) x 3 (forced choice attachment style) ANOVA was performed on the Kansas Marital Satisfaction Scale (see Table 10). A significant gender effect was found, $F(1, 176) = 4.13, p < .05$, indicating that adult females (\bar{M} = 16.37, SD = 4.08) report experiencing significantly greater relationship satisfaction than adult males (\bar{M} = 14.94, SD = 4.21).

A significant main effect for forced choice attachment style also was found, $F(2, 176) = 3.31, p < .05$. A Student Newman Keuls procedure revealed a significant difference

Table 10

2 (Sexual Orientation) x 2 (Gender) x 3 (Forced Choice Attachment Style) ANOVA for Kansas Marital Satisfaction Scale

Source	<u>F-ratios</u>	Hetero- sexual Males	Hetero- sexual Females	Homo- sexual Males	Homo- sexual Females
		Mean	Mean	Mean	Mean
		SD	SD	SD	SD
Sexual Orient.	1.07	15.33	16.69	14.55	15.94
Gender	4.13*	4.36	4.27	4.05	3.83
Attachmt Style	3.31*				
Sexual Orient. x Gender	.01				
Gender x Attachmt Style	1.80				
Sexual Orient. x Attachmt Style	1.71				
Sexual Orient. x Gender x Attachmt Style	1.53				

Note. df are (1-2, 176)

*p < .05

between the secure attachment style ($M = 91.94$, $SD = 12.17$) and both the avoidant attachment style ($M = 86.57$, $SD = 15.23$) and the anxious/ambivalent attachment style ($M = 85.30$, $SD = 13.01$), indicating that individuals endorsing the secure attachment style report significantly greater relationship satisfaction than individuals endorsing either of the two insecure attachment styles.

A 2 (sexual orientation) \times 2 (gender) \times 3 (forced choice attachment style) ANOVA was performed for the Index of Marital Satisfaction (see Table 11). A significant main effect for gender was found $F(1, 176) = 5.60$, $p < .05$, indicating that adult females ($M = 91.84$, $SD = 12.26$) report significantly greater relationship satisfaction than adult males ($M = 86.85$, $SD = 14.29$). No significant interactions were found.

Predictors of Relationship Satisfaction

In an attempt to predict satisfaction of relationships, stepwise multiple regressions were used as the basis for prediction. As independent variables, the various independent measures listed in Table 12 were used. Relationship satisfaction was predicted for two dependent variables: the Kansas Marital Satisfaction Scale (see Table 13) and the Index of Marital Satisfaction (see Table 14).

For heterosexual males, the best predictors of relationship satisfaction ($R = .83$) using the Kansas Marital Satisfaction Scale as the dependent variable were:

Table 11

2 (Sexual Orientation) x 2 (Gender) x 3 (Forced Choice Attachment Style) ANOVA for Index of Marital Satisfaction

Source	<u>F-ratios</u>	Hetero- sexual Males	Hetero- sexual Females	Homo- sexual Males	Homo- sexual Females
		Mean	Mean	Mean	Mean
		SD	SD	SD	SD
Sexual Orient.	2.66	89.29	93.57	84.32	89.51
Gender	5.60*	12.72	10.73	15.47	13.88
Attachmt Style	1.35				
Gender x Sexual Orient.	.46				
Gender x Attachmt Style	.03				
Sexual Orient. x Attachmt Style	.58				
Sexual Orient. x Gender x Attachmt Style	1.54				

Note. df are (1-2, 176)

*p < .05

Table 12

Independent Variables Used in the Prediction of Relationship Satisfaction

-
1. Lover's Satisfaction of Partner's Needs (Single-Item Measure)
 2. Beck Depression Inventory
 3. Body Area Satisfaction Scale (Self)
 4. Significance of Relationship (Single-Item Measure)
 5. Similarity of Partners (Single-Item Measure)
 6. State/Trait Anxiety Inventory (State Only)
 7. Body Area Satisfaction Scale (BASS) - Partner
 8. Rubin Liking Scale
 9. Self-Esteem (Single-Item Measure)
 10. Rubin Love Scale
 11. Relationship Intensity (Single-Item Measure)
 12. Compatibility of Partners (Single-Item Measure)
 13. Overall Satisfaction With Relationship (Single-Item Measure)
-

Table 13

Multiple Regressions of Relationship Satisfaction (Kansas Marital Satisfaction Scale) on Independent Measures

Sample	R	R ²	Adj. R ²	Std. Err.	Independent Variables	
					Measure	Beta
Hetero- sexual Male	.83***	.69***	.68***	2.47	Overall Satisf. (Single-Item)	.62***
					Rubin Love Scale	.33***
Hetero- sexual Female	.84***	.70***	.69***	2.33	Overall Satisf. (Single-Item)	.84***
Homo- sexual Male	.82***	.67***	.65***	2.36	Overall Satisf. (Single-Item)	.81***
					Similarity of Partners	-.36**
					Rubin Liking Scale	.26*
Homo- sexual Female	.82***	.68***	.66***	2.25	Overall Satisf. (Single-Item)	.58***
					Compatibility of Partners	.32*

* $p < .05$

** $p < .01$

*** $p < .001$

Table 14

Multiple Regressions of Relationship Satisfaction (Index of Marital Satisfaction) on Independent Measures

Sample	R	R ²	Adj. R ²	Std. Err.	Independent Variables	
					Measure	Beta
Hetero- sexual Male	.86***	.74***	.73***	6.66	Overall Satisf. (Single-item)	.50***
					Rubin Love Scale	.34***
					Similarity of Partners	.21*
Hetero- sexual Female	.90***	.80***	.79***	5.14	Overall Satisf. (Single-Item)	.63***
					Compatibility of Partners	.21*
					Significance of Relationship	.21*
Homo- sexual Male	.91***	.83***	.82***	6.70	Self-Esteem (Single-Item)	.48***
					Rubin Liking Scale	.26**
					Lover's Satisf. of Partner's Needs	.33***
Homo- sexual Female	.78***	.61***	.58***	9.04	Lover's Satisf. of Partner's Needs	.52***
					BDI	-.36*

* $p < .05$

** $p < .01$

*** $p < .001$

1) overall satisfaction with the relationship (single-item measure); and 2) the Rubin Love Scale. Using the Index of Marital Satisfaction as the dependent variable, the best predictors of relationship satisfaction ($R = .86$) were: 1) overall satisfaction with the relationship (single-item measure); and 2) the Rubin Love Scale.

For heterosexual females, the best predictor of relationship satisfaction ($R = .84$) using the Kansas Marital Satisfaction Scale as the dependent variable was the overall satisfaction with the relationship (single-item measure). Using the Index of Marital Satisfaction as the dependent variable, the best predictors of relationship satisfaction ($R = .90$) were: 1) the overall satisfaction with the relationship (single-item measure); 2) compatibility of partners; and 3) the significance of the relationship.

For homosexual males, the best predictors of relationship satisfaction ($R = .82$) using the Kansas Marital Satisfaction Scale as the dependent variable were: 1) the overall satisfaction with the relationship (single-item measure; 2) similarity of partners; and 3) the Rubin Liking Scale. Using the Index of Marital Satisfaction as the dependent variable, the best predictors of relationship satisfaction ($R = .91$) were: 1) self-esteem (single-item measure); 2) the Rubin Liking Scale; and 3) lover's

satisfaction of partner's needs.

For homosexual females, the best predictors of relationship satisfaction ($R = .82$) using the Kansas Marital Satisfaction Scale as the dependent variable were: 1) the overall satisfaction with the relationship; and 2) compatibility of partners. Using the Index of Marital Satisfaction as the dependent variable, the best predictors of relationship satisfaction ($R = .78$) were: 1) lover's satisfaction of partner's needs; and 2) the Beck Depression Inventory.

Relationship Success

Relationship success was hypothesized to vary as a function of gender, sexual orientation, and forced choice attachment style. A main effect for forced choice attachment style was predicted. Individuals endorsing the secure attachment style were expected to report significantly greater relationship success than individuals endorsing either of the two insecure attachment styles. Results of a 2 (sexual orientation) \times 2 (gender) \times 3 (forced choice attachment style) for relationship success revealed no significant main effects, $F(2, 183) = 1.18, p = .31$.

A two-way interaction (sexual orientation \times gender) was also hypothesized. Heterosexual males and heterosexual females were expected to report significantly greater relationship success than homosexual females, who would report significantly greater relationship success than

homosexual males. Results of a 2 (sexual orientation) x 2 (gender) x 3 (forced choice attachment style) revealed a non-significant two-way interaction, $F(1, 183) = .38$, $p = .60$.

A three-way interaction also was hypothesized. Relationship success was expected to vary as a function of sexual orientation, gender, and forced choice attachment style. The results of a 2 (sexual orientation) x 2 (gender) x 3 (forced choice attachment style) for relationship success revealed no significant three-way interaction, $F(2, 183) = 1.01$, $p = .37$.

Predictors of Relationship Success

In an attempt to predict success of relationships, forward stepwise multiple regressions were used as the basis for prediction. As independent variables, the various independent measures listed in Table 15 were used. The dependent variable used was an unweighted composite of subjects' ratings of a) the satisfaction, b) the intensity, c) the significance, and d) lover's satisfaction of partner's needs. Predictors of relationship success for each sexual orientation x gender group are presented in Table 16.

For heterosexual males, the best predictors of relationship success ($R = .83$) were: 1) the Index of Marital Satisfaction; and 2) the Kansas Marital Satisfaction Scale.

For heterosexual females, the best predictors of

Table 15

Independent Variables Used in the Prediction of Relationship Success

-
1. Index of Marital Satisfaction
 2. Beck Depression Inventory
 3. Body Area Satisfaction Scale (Self)
 4. Self-Esteem (Single-Item Measure)
 5. Similarity of Partners (Single-Item Measure)
 6. State-Trait Anxiety Inventory (State Only)
 7. Rubin Love Scale
 8. Body Area Satisfaction Scale (Partner)
 9. Rubin Liking Scale
 10. Compatibility of Partners (Single-Item Measure)
 11. Kansas Marital Satisfaction Scale
-

Table 16

Multiple Regressions of Relationship Success on Independent Measures.

Sample	R	R ²	Adj. R ²	Std. Err.	Independent Variables	
					Measure	Beta
Hetero- sexual Male	.83***	.68***	.67***	2.46	Index of Marital Satisfaction	.56***
					Kansas Marital Satisf. Scale	.32*
Hetero- sexual Female	.87***	.76***	.75***	2.08	Index of Marital Satisfaction	.71***
					Rubin Love Scale	.28**
Homo- sexual Male	.87***	.75***	.74***	2.74	Index of Marital Satisfaction	.66***
					Rubin Love Scale	.27*
Homo- sexual Female	.88***	.76***	.75***	2.85	Compatibility of Partners	.31*
					Kansas Marital Satisf. Scale	.40**
					Rubin Love Scale	.30*

*p < .05

**p < .01

***p < .001

relationship success ($R = .87$) were: 1) the Index of Marital Satisfaction; and 2) the Rubin Love Scale.

For homosexual males, the best predictors of relationship success ($R = .87$) were: 1) the Index of Marital Satisfaction; and 2) the Rubin Love Scale.

For homosexual females, the best predictors of relationship success ($R = .88$) were: 1) compatibility of partners; 2) the Kansas Marital Satisfaction Scale; and 3) the Rubin Love Scale.

Parental Caregiving and Attachment Style

It was hypothesized that individuals reporting a secure attachment style would perceive their parents to have been warm and not rejecting. Likewise, individuals reporting an insecure attachment style would report their parents to have been cold or inconsistent and rejecting.

Two separate chi-square analyses were performed (one for mother and one for father) to determine subjects' endorsements of parental caregiving styles. Subjects were grouped according to endorsement of their own attachment style (secure, avoidant, anxious/ambivalent). Parental caregiving styles were defined as "warm/responsive," "cold/rejecting," and "ambivalent/inconsistent" (rating of 1, 2, or 3). Table 17 reports subjects' endorsement of maternal caregiving style; Table 18 reports subjects' endorsement of paternal caregiving style.

In terms of subjects' recollection of maternal

Table 17

Descriptive Histories of Maternal Caregiving Styles with Relation to Attachment Styles

Attachment Style	Maternal Caregiving Style			
	Warm/ Responsive	Cold/ Rejecting	Ambivalent/ Inconsistent	Chi-Square
Secure	67%	3%	30%	11.17*
Avoidant	52%	6%	42%	
Anxious/ Ambivalent	36%	3%	61%	

Note. The χ^2 analysis was performed as a 3 (parental caregiving style) x 3 (forced choice attachment style).

df are (4)

*p < .05

Table 18

Descriptive Histories of Paternal Caregiving Styles with
Relation to Attachment Styles

Attachment Style	Paternal Caregiving Style			Chi- Square
	Warm/ Responsive	Cold/ Rejecting	Ambivalent/ Inconsistent	
Secure	50%	13%	37%	7.96
Avoidant	36%	28%	36%	
Anxious/ Ambivalent	34%	19%	47%	

Note. The χ^2 analysis was performed as a 3 (parental caregiving style) x 3 (forced choice attachment style).

df are (4)

caregiving, individuals endorsing the secure attachment style classified their mothers as 67% warm/responsive, 3% cold/rejecting, and 30% ambivalent/inconsistent.

Individuals endorsing the avoidant attachment style classified their mothers as 52% warm/responsive, 6% cold/rejecting, and 42% ambivalent/inconsistent.

Individuals endorsing the anxious/ambivalent attachment style classified their mothers as 36% warm/responsive, 3% cold/rejecting, and 61% ambivalent/inconsistent. Results of the chi-square analysis ($\chi^2 = 11.17$, $df = 4$, $p < .05$) revealed a significant difference between groups.

A Marascuilo multiple comparison technique was performed, indicating that significantly more individuals endorsing the secure attachment style (58%) than the avoidant or anxious/ambivalent (31% and 11%, respectively) attachment styles classified their mothers as warm/responsive.

In terms of subjects' recollection of paternal caregiving, individuals endorsing the secure attachment style classified their fathers as 50% warm/responsive, 13% cold/rejecting, and 37% ambivalent/inconsistent.

Individuals endorsing the avoidant attachment style classified their fathers as 36% warm/responsive, 28% cold/rejecting, and 36% ambivalent/inconsistent.

Individuals endorsing the anxious/ambivalent attachment style classified their fathers as 34% warm/responsive, 19%

cold/rejecting, and 47% ambivalent/inconsistent. Results of the chi-square analysis ($\chi^2 = 7.96$, $df = 4$, $p = .09$) were not significant.

Parental Caregiving and Sexual Orientation

Two separate chi-square analyses were performed (one for mother and one for father) to determine subjects' endorsements of parental caregiving styles. Subjects were grouped according to gender x sexual orientation. Parental caregiving styles were defined as "warm/responsive," "cold/rejecting," and "ambivalent/inconsistent" (rating of 1, 2, or 3). Table 19 shows subjects' endorsements of maternal caregiving style; Table 20 shows subjects' endorsements of paternal caregiving style.

In terms of subjects' recollection of maternal caregiving, adult heterosexual males classified their mothers as 76% warm/responsive and 24% ambivalent/inconsistent. Adult heterosexual females classified their mothers as 61% warm/responsive, 6% cold/rejecting, and 33% ambivalent/inconsistent. Adult homosexual males classified their mothers as 41% warm/responsive, 4% cold/rejecting, and 55% ambivalent/inconsistent. Adult homosexual females classified their mothers as 43% warm/responsive, 9% cold/rejecting, and 48% ambivalent/inconsistent. Results of the chi-square analysis ($\chi^2 = 22.34$, $df = 6$, $p < .01$) revealed a significant difference between groups.

Table 19

Descriptive Histories of Maternal Caregiving Styles by Sexual Orientation and Gender

Attachment Style	Maternal Caregiving Style			
	Warm/ Responsive	Cold/ Rejecting	Ambivalent/ Inconsistent	Chi-Square
Heterosexual Male	76%	0%	24%	22.34**
Heterosexual Female	61%	6%	33%	
Homosexual Male	41%	4%	55%	
Homosexual Female	43%	9%	48%	

Note. The χ^2 analysis was performed as a 3 (parental caregiving style) x 4 (heterosexual male, heterosexual female, homosexual male, homosexual female)

df are (6)

**p < .01

Table 20

Descriptive Histories of Paternal Caregiving Styles by Sexual Orientation and Gender

Attachment Style	Paternal Caregiving Style			Chi-Square
	Warm/ Responsive	Cold/ Rejecting	Ambivalent/ Inconsistent	
Heterosexual Male	43%	11%	46%	18.77**
Heterosexual Female	46%	10%	44%	
Homosexual Male	29%	35%	36%	
Homosexual Female	60%	17%	23%	

Note. The χ^2 analysis was performed as a 3 (parental caregiving style) x 4 (heterosexual male, heterosexual female, homosexual male, homosexual female)

df are (6)

**p < .01

A Marascuilo multiple comparison technique was performed, indicating that significantly more adult heterosexual males and females (38% and 27%, respectively) than adult homosexual females (14%) classified their mothers as warm/responsive.

In terms of subjects' recollection of paternal caregiving, adult heterosexual males classified their fathers as 43% warm/responsive, 11% cold/rejecting, and 46% ambivalent/inconsistent. Adult heterosexual females classified their fathers as 46% warm/responsive, 10% cold/rejecting, and 44% ambivalent/inconsistent. Adult homosexual males classified their fathers as 29% warm/responsive, 35% cold/rejecting, and 36% ambivalent/inconsistent. Adult homosexual females classified their fathers as 60% warm/responsive, 17% cold/rejecting, and 23% ambivalent/inconsistent. Results of the chi-square analysis ($\chi^2 = 18.77$, $df = 6$, $p < .01$) revealed a significant difference between groups.

A Marascuilo multiple comparison technique was performed, indicating that significantly more adult homosexual males (53%) than adult homosexual females (16%) classified their fathers as cold/rejecting.

DISCUSSION

The purpose of the present investigation was to examine the relationships between sexual orientation, attachment theory, relationship satisfaction and relationship success. Specifically, it was hypothesized that differences between heterosexual and homosexual subjects would exist in self-reported attachment in romantic relationships, in relationship satisfaction and success, and in the history of parental attachment. Additionally, an attachment measure, not previously used with homosexual populations, was validated. The validation process will be discussed, followed by a discussion of the degree to which the results of this study supported the general hypotheses, a summary of the important findings, cautions and directions for future research.

Reliability of Established Measures for use with Heterosexual and Homosexual Populations

The measures used in this study had surprisingly high internal consistencies for all four groups. The three subscales of the Collins and Read Adult Attachment Scale had the lowest mean scores of any of the measures used in this study; however, it should be noted that internal consistencies for the Collins and Read Adult Attachment Scale were higher in the present study than in the original study (Collins & Read, 1990).

Collins and Read Adult Attachment Scale

Upon examination of the factor analyses for the Collins and Read Adult Attachment Scale, it was determined that certain items differed as a function of group. For example, Item 17 ("I am comfortable having others depend on me") had low factor loadings for heterosexuals and was not included in any of the three composite scores. Item 7 ("I do not often worry about being abandoned") had low factor loadings for heterosexual males and was not included. For heterosexuals, being able to depend on others is important, but perhaps the thought of feeling comfortable having someone depend on them is not an issue and is not significantly correlated with any one of the three factors. Specifically, our society engenders in its children the notion that when they grow up they will get married and have a family. Heterosexuals then, particularly heterosexual males, grow up expecting someone to depend on them for support and survival. The thought of comfort is possibly, then, never considered.

In relation to Item 7 and heterosexual males, the issue of being abandoned may not be a concern for that group, and therefore does not significantly correlate with any one of the three factors present. Heterosexual males may feel as though if they are abandoned, they could easily find another female with whom they can begin a romantic relationship.

For homosexual males, Item 11 ("I want to merge

completely with another person") had low factor loadings and was not included in any of the three composite scores. One possible explanation for this relates to the tendency for homosexual males to have multiple partners. Perhaps the thought of merging completely with another individual interferes with the tendency of homosexual males to acquire numerous sexual partners. This is a possible explanation for this item not correlating with any one of the three factors present.

For homosexual females, Item 5 ("I find it difficult to trust others completely") and Item 9 ("I find others are reluctant to get as close as I would like") had low factor loadings and were not included in any of the three composite scores. These two items are related in the sense that if a homosexual female feels that a partner or potential partner is not becoming close, then the homosexual female feels that she can not trust the partner or potential partner. For homosexual females, the possibility exists that another factor, however small, is present. This factor may be related to the issue of trust.

One of the most interesting observations resulting from the factor analysis of the Adult Attachment Scale was the ordering of factors for heterosexuals and homosexuals. As with the original factor analysis of the scale, the factors were ordered as follows for heterosexual females: Depend, Anxiety, and Close. For heterosexual males the factors were

ordered Depend, Close, and Anxiety. But for homosexuals, the factors were ordered Close, followed by Depend, and finally, Anxiety.

For heterosexuals, perhaps the Depend factor is greater due to societal norms and the expectations for getting married and raising a family. This entails a long-term commitment, and having a spouse on whom you can depend is an important determinant in the success of a marriage and family.

For homosexuals, perhaps the Close factor is greater for several reasons. An acknowledged homosexual realizes that he/she probably will not marry and have a family, therefore he/she will not have to depend on someone else to help nurture a marriage and family. Knowing this, the homosexual individual then focuses his/her attention on finding someone with whom he/she can merge and form an emotional bond. But for homosexuals (as opposed to heterosexuals), this may not be as easily accomplished. The outlets for homosexuals to meet other homosexuals are limited; therefore, the homosexual individual would likely place greater emphasis on just meeting someone, and further, becoming close to that individual.

The possibility also exists that something is inherently different in the personalities of homosexuals, which leads to a difference in the attachment experience. Researchers have recently found evidence of a homosexuality

gene in males (Hamer, Hu, Magnuson, Hu, & Pattatucci, 1993). Perhaps this differentiation in human sexual development is a contributing factor in the personality development of homosexual males.

Furthermore, society and socialization may contribute to these differences. Moreover, could parents contribute to these differences? It is possible that parents treat homosexual children differently if they suspect that their children are not "normal" by society's standards, whereby the children become distanced from one or both parents.

Endorsements of Forced Choice Attachment Styles

In contrast to original hypotheses, the groups did not differ proportionally in the degree of secure, avoidant, and anxious/ambivalent attachment. Results were in the predicted direction, but were not statistically significant. It is difficult to determine why differences did not exist. It is possible that the measure used, the Attachment Style Measure by Hazan and Shaver, was not sensitive enough to detect differences between groups. On the other hand, perhaps differences simply did not exist between groups.

Relationship Satisfaction

Past literature has reported that relationship satisfaction is experienced both similarly (Kurdek & Schmitt, 1986; Peplau & Cochran, 1990) and dissimilarly (Kurdek, 1988), depending upon sexual orientation. It was hypothesized that relationship satisfaction would differ in

homosexual and heterosexual populations; however, results indicated that sexual orientation was not a factor in determining relationship satisfaction.

One possible reason for the lack of significant differences between homosexuals and heterosexuals on relationship satisfaction relates directly to the attachment experience itself. As previously stated, homosexuals have fewer outlets in which to meet other homosexuals; therefore, actually meeting someone with whom an affectional bond can be formed can be extremely difficult. As a result of this obstacle, homosexuals could view their relationships (no matter how short-lived) as satisfying, partly because the difficulty involved in "finding" someone is so great that the homosexual erroneously perceives the conquest itself as the satisfying element. More research needs to address possible perceptions such as these, which may produce insight into an area of relationship quality on which researchers still do not agree.

As hypothesized, a main effect for attachment style was found for relationship satisfaction. Analyses revealed that individuals endorsing the secure attachment style do, in fact, report significantly greater relationship satisfaction. Individuals endorsing the secure attachment style report finding it easy to get close to others, as well as not worrying about someone getting too close. These attributes would help to facilitate a romantic relationship.

A main effect for gender also was found for relationship satisfaction. Females reported significantly greater relationship satisfaction than males. Perhaps the greater emotionality of females leads them to experience relationships differently than males, thereby reporting greater relationship satisfaction. Psychologists and sociologists have assumed that women tend to put their relationships before anything else and that this is biologically determined or, at the very least, a consequence of having been taught from childhood that the most important things in the world were their partners and families (Blumstein & Schwartz, 1983).

Relationship Success

Relationship success is difficult to define. Is it a component of relationship satisfaction, or is it a separate construct? At the present time, the best "measure" of relationship success was actually several single-item measures which were combined to form a composite score.

A main effect for attachment style, a two-way interaction for sexual orientation and gender, and a three-way interaction for sexual orientation, gender, and attachment style were all hypothesized for relationship success. No significance resulted from the analyses. Perhaps the scale (or lack thereof) itself is what led to the lack of significant findings.

Due to the larger number of partners for homosexual

males, it was expected that homosexual males would experience significantly less relationship success than the other three groups. The lack of a sensitive, multi-item scale for relationship success could be partly to blame for the lack of findings in this research; however, this is unlikely given that the internal consistencies were high for this measure. The scale appears to exhibit adequate reliability. There is also the possibility that no significant differences exist for groups on any measure of relationship success.

Parental Caregiving and Forced Choice Attachment Styles

The Parental Caregiving Style Scale, developed by Hazan and Shaver (1986), has been used but several times in published literature. The scale is a trichotomous forced choice measure, and each of the three vignettes used to describe a parent is in accordance with attachment as described by Ainsworth and colleagues (1976). Because attachment styles were being assessed, it was possible that parent-child attachment might relate to adult attachment in relationship satisfaction and success.

It was hypothesized that individuals endorsing the secure attachment style would recollect their parents to have been warm and not rejecting. This hypothesis was supported for maternal caregiving. That is, results indicated that significantly more individuals endorsing the secure attachment style than either insecure attachment

style classified their mothers as warm/responsive. Perhaps being secure with one's self results from warm and responsive caregiving by the primary caregiver, who is usually the mother.

The lack of significant findings as a function of attachment for paternal caregiving is possibly due to similar perceptions of paternal caregiving for all three attachment styles. The predominant caregiver is usually the mother. Thus, it is possible that maternal caregiving is more important for adult attachment than is paternal caregiving.

Parental Caregiving Styles and Sexual Orientation

The patterns of parental caregiving reported in the present study are extremely interesting for sexual orientation by gender groups. Significantly more heterosexual males and females than homosexual females classified their mothers as warm/responsive. This may in part reflect that lesbian women tend to reject the female gender role of women as passive and nurturing as an early step in their acceptance of a lesbian identity (Cass, in McWhirter, Sanders, & Reinisch, 1990). In other words, lesbian identity may entail the rejection of the stereotypical warm and nurturing mother. Because of this, homosexual females report their mothers as being anything but warm and responsive. It also is possible that mothers reject daughters if they suspect that their daughters are

lesbian, thereby contributing to the daughter's perception of the mother as anything but warm/responsive.

For paternal caregiving, significantly more homosexual males than homosexual females classified their fathers as rejecting. One possible explanation for this phenomenon is that homosexual males do not want their fathers to reject them or think of them in terms any less than masculine. Therefore, the homosexual male may distance himself from his father, and in his mind, view the father as cold and distant.

An interesting trend emerges when looking at percentage of endorsements for all groups. For maternal caregiving, the largest percentage endorsement by heterosexuals was warm/responsive (76% heterosexual male and 61% heterosexual female); the largest percentage endorsement by homosexuals was ambivalent/inconsistent (55% homosexual male and 48% homosexual female). Why do the majority of heterosexuals report their mothers as warm/responsive and the majority of homosexuals view their mothers as ambivalent/inconsistent? Is there possibly some truth to the notion of a "cold and distant" father? If so, could the mother be overcompensating. That is, trying to be both mother and father, which results in the child's perception of the mother as ambivalent and/or inconsistent? Another explanation is that mothers love their children, yet at some level reject them because of sexual orientation, thus

appearing inconsistent. This subject area deserves further scrutiny.

Summary of Important Findings

In summary, many of the hypothesized differences between heterosexual and homosexual subjects were supported. Some unexpected differences surfaced. For instance, the Collins and Read Adult Attachment Scale differed as a function of sexual orientation. The finding that dependency appears to be a more important factor for heterosexuals than homosexuals is an important stepping stone for future research. Past researchers have not examined differences in relationship measures, erroneously assuming that there were no differences between homosexuals and heterosexuals on attachment measures.

Results of this study indicate that significant gender differences exist in regard to the attachment process and relationship satisfaction. Recall that adult females report finding it significantly easier than adult males to depend on others and to get close to others. Females in our society are socialized from childhood to be caring and nurturing. This stereotypical gender role fosters in females the notion that family and relationships are extremely important, which may, indeed, contribute to females placing more emphasis on attachment and romantic relationships in general.

The results of this study suggest that researchers

should take care when using certain measures across groups. Particularly in the area of attachment and romantic relationships, it appears that different sexual orientations prescribe a different experience of attachment and romance.

Limitations of the Present Research

One limitation of the present study, as previously mentioned, involves the quality of the attachment measures used. Given that factor analyses produced items that loaded differently for heterosexuals and homosexuals, perhaps the Collins and Read measure is not a valid measure of attachment in relationships. On the other hand, results of this study could be accurate in that the two sexual orientations do, in fact, experience attachment differently. Future researchers should try to replicate the present findings.

Another limitation of this research was that of the sample studied. Many of the homosexual subjects (male and female) were recruited from postings on national computer bulletin boards and these individuals were recruited from many different areas of the country. Generalization to homosexuals should be good; however, generalization to heterosexuals is questionable. The majority of heterosexual subjects (both male and female) were recruited from the Psychology Department of one university. This study, however, provided insight into differences in attachment and relationships as a function of gender and sexual

orientation.

Suggestions for Further Research

Future research should focus on the development of an attachment scale that is appropriate for all sexual orientations, or perhaps the development of a separate attachment measure for homosexuals is in order.

Further exploration in the area of relationship success also is needed. A more definitive explanation of relationship success should be developed. The issue of whether relationship success is a component of relationship satisfaction or a construct of its own deserves attention.

The present study identified several differences between heterosexuals and homosexuals in regard to perceived parental caregiving. Additional research should further examine the relationships between parental caregiving and sexual orientation.

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Appendix A

Informed Consent

This is to certify that I agree to participate as a volunteer in a scientific investigation at Old Dominion University conducted by Earl C. Riggins, III under the direction of Dr. Michelle Kelley, Professor of Psychology.

The investigation and the nature of my participation have been described and explained to me. I understand that the basic nature of this research involves my completing a variety of questionnaires concerning my attitudes, beliefs, and behaviors.

I understand that some of the items on the questionnaires ask about personal or intimate matters. A code number rather than my name will be associated with my responses. The confidential information I provide will not be conveyed to others in any manner that reveals my personal identity. I understand that I am free to withhold any answer to specific items on questionnaires.

I acknowledge that I was informed about any possible risk to my health and well being that might be related to my participation in this research.

I understand that I am free to end my participation at any time, without penalty.

I have been given the opportunity to ask any questions, and all such questions have been answered to my satisfaction.

I understand that I may contact Dr. Michelle Kelley (683-4459) and/or the Psychology Department Committee for the Protection of Human Subjects [(804) 683-4439] and/or that committee for the College of Sciences should I wish to express any opinions regarding the conduct of this study.

Signature: _____ Date: _____

Date of Birth: _____

Appendix B

Implied Consent

By completing and mailing this questionnaire packet back to Old Dominion University, I am implying my consent to participate in a scientific investigation at Old Dominion University conducted by Earl C. Riggins, III under the direction of Dr. Michelle Kelley, Professor of Psychology.

I understand that the basic nature of this research involves my completing a variety of questionnaires concerning my attitudes, beliefs, and behaviors.

I understand that some of the items on the questionnaires ask about personal or intimate matters. I understand that I am free to withhold any answer to specific items on questionnaires.

By returning this questionnaire packet, I am acknowledging that I was informed about any possible risks to my health and well being that might be related to my participation in this research.

I understand that I may contact Dr. Michelle Kelley [(804) 683-4459] and/or the Psychology Department Committee for the Protection of Human Subjects [(804) 683-4439] and/or that committee for the College of Sciences should I wish to express any opinions regarding the conduct of this study.

Again, by returning this questionnaire packet to Old Dominion University, I am implying my consent to participate in this scientific investigation.

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Appendix P

General Information Sheet

Please complete the following items by filling in or circling a response to each item.

GENDER: Male Female AGE: _____

RACE/ETHNICITY: Asian Black
White Hispanic
Native American Other: _____

Are you currently in a romantic relationship?
Yes No (circle one)

RELATIONSHIP STATUS (circle one):

*Single/Not Dating *Single/Dating More Than One Person
*Exclusive Partner *Living With Exclusive Partner
*Married *Divorced
*Widowed *Other: _____

If Divorced or Widowed, how long have you been divorced or widowed? _____

RELIGION: Atheist Baptist Catholic Episcopalian
Jewish Methodist Mormon Protestant
Other: _____

EDUCATION: Number of Years _____

(e.g., if you completed high school only, you would write "12." If you have a Bachelor's Degree, write "16." If you hold a graduate degree, please add to "16" the number of additional years it took to earn your graduate degree.)

ANNUAL PERSONAL INCOME (check one):

- | | |
|--|--|
| <input type="checkbox"/> Under \$5,000 | <input type="checkbox"/> Between \$55,000 & \$59,999 |
| <input type="checkbox"/> Between \$ 5,000 & \$ 9,999 | <input type="checkbox"/> Between \$60,000 & \$64,999 |
| <input type="checkbox"/> Between \$10,000 & \$14,999 | <input type="checkbox"/> Between \$65,000 & \$69,999 |
| <input type="checkbox"/> Between \$15,000 & \$19,999 | <input type="checkbox"/> Between \$70,000 & \$74,999 |
| <input type="checkbox"/> Between \$20,000 & \$24,999 | <input type="checkbox"/> Between \$75,000 & \$79,999 |
| <input type="checkbox"/> Between \$25,000 & \$29,999 | <input type="checkbox"/> Between \$80,000 & \$84,999 |
| <input type="checkbox"/> Between \$30,000 & \$34,999 | <input type="checkbox"/> Between \$85,000 & \$89,999 |
| <input type="checkbox"/> Between \$35,000 & \$39,999 | <input type="checkbox"/> Between \$90,000 & \$94,999 |
| <input type="checkbox"/> Between \$40,000 & \$44,999 | <input type="checkbox"/> Between \$95,000 & \$99,999 |
| <input type="checkbox"/> Between \$45,000 & \$49,999 | <input type="checkbox"/> Over \$100,000 |
| <input type="checkbox"/> Between \$50,000 & \$54,999 | |

OTHER INFORMATION:

1. Were your parents married during your childhood (0-18 yrs old)? Yes No

If no, how old were you when they divorced or separated?

2. Who did you live with during your childhood? (biological mother & father, etc.) _____

3. Have you ever been tested for the HIV antibody?
Yes No

If yes, did you test positive? Yes No

4. If you have a sexual partner, have they been tested for the HIV antibody? Yes No

If yes, did he/she test positive? Yes No

5. If you are living with a partner, how long have you been living together? _____

6. What is your occupation? _____

7. Do you have any children? Yes No

If yes, how many? ____

8. Did you respond to the "relationship" questions in this packet based on your current partner or a past partner?

If your response was "current partner," how long have the two of you been together? _____

If your response was "past partner," how long has it
been since the two of you were together? _____
How long were the two of you together? _____

9. Based on your response to Item #8 above, were you
monogamous during this relationship, i.e., did you only
engage in sexual activity with this partner?

Yes No (circle one)

If you were not monogamous, how many other sexual
partners did you have during the time you were involved
in this relationship? _____

Appendix Q

Summary and Feedback

We greatly appreciate your time and effort, as well as your willingness to openly share information with us. We would again like to ensure you that all information regarding you and your responses will be kept strictly confidential, and will in no way be associated with your name.

We ask that you not discuss the topic of this study or the contents of the questionnaires with anyone. In studies of this nature it is important that we obtain as close to a random sample of participants as possible and that each participant experience the study for himself or herself without any preconceived notions or biased influences.

Any questions or concerns directly regarding this study can be directed to the experimenter, Earl Riggins at (804) 723-3053, or the faculty sponsor, Dr. Michelle Kelley at (804) 683-4459.

A debriefing sheet is available for ODU students at the Peer Advisor's office. All other participants may request a debriefing sheet by calling the experimenter, Earl Riggins, by mailing the request to him at the following address:

Earl C. Riggins, III
205-C Dockside Drive
Hampton, VA 23669

or by sending an email request to the experimenter at the following account:

ecr100g@oduvvm.cc.odu.edu

Thank you again for your participation!